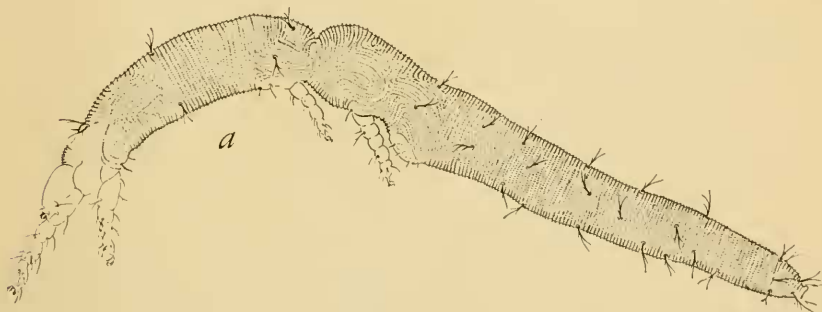


A NEW SPECIES OF NEMATALYCUS STRENZKE WITH NOTES  
ON THE FAMILY<sup>1</sup>

(ACARINA, NEMATALYCIDAE)

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In a recent paper Strenzke described *Nematalycus nematoides* and discussed its position in the Trombidiformes mites. His conclusion was that the mite, which was immature, represented a new family, Nematalycidae, related to the Endeostigmata (Pachygnathoidea). The finding of a second species and possibly a distinct genus in this family has indicated that these mites are more closely related to the Tydeoidea rather than the Pachygnathoidea. Strenzke apparently



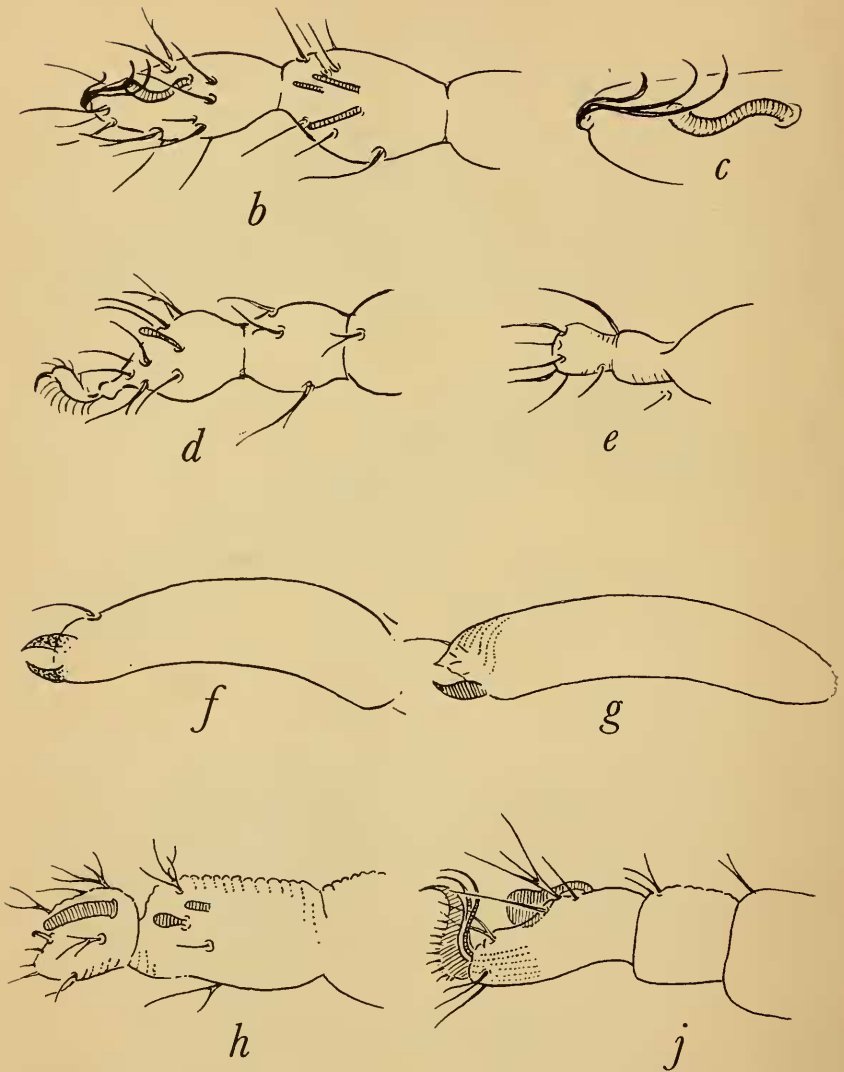
*Nematalycus strenzkei*, new species. Fig. a, lateral view of female.

believed that he had a larva instead of a nymph and in so doing mistook the palps for the maxillae, and legs I (which in his species do not possess claws) for the palps. Consequently, the rodlike sensory setae of leg I were assumed to be analogous to those found on the palps in some of the pachygnathoid mites. A study of Strenzke's excellent figures, and of two females and one nymph of the species to be described, shows a relationship to the Tydeoidea, although perhaps somewhat isolated.

***Nematalycus strenzkei*, new species**  
(Figs. a, b, e, d, e, f)

This species is characterized by the presence of tiny opposed chelae, the sickle-like claws and empodium on tarsus I, the lack of claws and the presence of a broad, distally hooked, rayed empodia on the other tarsi. *N. nematoides* Strenzke (figs. g, h, and i) has a reduced membranous fixed chela, no claws or empodium on leg I, sickle-like claws and a hooked, rayed empodium on legs II-IV. The

<sup>1</sup> A contribution from the Pinellas Biological Laboratory, Inc.



*Nematalycus strenzkei*, new species. Fig. b, tarsus and tibia I; fig. c, detail of tarsus I; fig. d, tarsus and tibia II; fig. e, palpus; fig. f, chelicera. *Nematalycus nematoides* Strenzke. Fig. g, chelicera; fig. h, tarsus and tibia I; fig. i, tarsus and tibia II (after Strenzke).

difference in the tarsal claws and chelicerae may be of generic value, but until more species are discovered it is preferred to keep the genus broad.

*Female*.—Palpus (fig. e) tiny, two segmented, almost coalesced, with few, simple setae. Chelicerae (fig. f) small, with distal dorsal seta, and two small opposed chelae. Body (fig. a) very elongate, wormlike, with strongly tuberculate striae; anteriorly a small longitudinally striate tubercle bears a pair of short simple setae, and laterad of these are two pairs of bifurcate setae. Body setae arranged as figured and apparently all trifurcate. Genital opening of female with pairs of short simple setae and three pairs of genital suckers. Legs small and with few setae. Leg I (fig. b and c) with sickle-like claws and empodium; other legs (fig. d) without claws but with rayed, distally hooked, broad empodia. Tarsus I (figs. b and c) with S-like, rodlike sensory seta; tibia I with three straight, rodlike sensory setae. Tarsus II (fig. d) with a single clublike sensory seta; other leg setation as figured. Length, 390  $\mu$ .

*Holotype*.—One female taken from pasture soil, McClain County, Oklahoma, August 16, 1949, by Thomas E. Rogers. U. S. National Museum No. 2241.

*Paratype*.—One female with the above data.

A single nymph, similar to the female but lacking the genital opening, was also studied.

#### REFERENCES

- Cunliffe, F., 1955. A proposed classification of the trombidiforme mites (Acarina). Proc. Ent. Soc. Wash. 55(5):209-218.
- Strenzke, K., 1954. *Nematolycus nematoides* n. gen. n. sp. (Acarina Trombidiformes) aus dem grundwasser der Algerischen Küste. Vie et Milieu 4(4): 638-647.

#### BOOK REVIEW

**HISTOLOGY OF THE OVARY OF THE ADULT MEALWORM TENEBRIO MOLITOR L. (COLEOPTERA, TENEBRIONIDAE)**, by Loren L. Schlottman and Philip F. Bonhag, University of California Publications in Entomology, Vol. 11, No. 6, pp. 351-394, pls. 42-50, Sept. 14, 1956. Price \$1.00.

The morphology and histochemistry of the ovarioles and the development of follicles are discussed. The telotrophic ovariole of *Tenebrio* is compared with the similar ovariole of the Heteropteran *Oncopeltus fasciatus*. Localizations of ribonucleic acid (RNA) and desoxyribonucleic acid (DNA) are given, along with evidence of the contribution of these acids by the apical trophocytes to the enlarging oocytes. It is interesting to note that the authors believe the follicular epithelium develops from the interstitial cells of the germarium via the pre-follicular tissue. Protozoan parasites in the ovarioles were quite common. Good photomicrographs show cellular structure, protozoan parasites, and evidence of the acids mentioned.—T. J. SPILMAN, Entomology Research Branch, U.S. Department of Agriculture, Washington, D. C.